

CLAIMS

What is claimed is:

1. A sheet material clamp comprising:
a rigid clamp base having a select length and a clamping surface;
5 at least two means for applying clamping pressure attached to the rigid clamp base,
the means for applying clamping pressure being spaced along the length of the rigid clamp
base; and
a pressure foot operatively associated with each means for applying clamping
pressure, the pressure foot configured such that actuation of the means for applying
10 clamping pressure drives the pressure foot toward the clamping surface.
2. The sheet material clamp of claim 1 wherein each means for applying
clamping pressure is fixedly attached to the rigid clamp base.
- 15 3. The sheet material clamp of claim 1 wherein the means for applying
clamping pressure is attached to the rigid clamp base in a manner enabling it to move
lengthwise relative to the clamp base.
4. The sheet material clamp of claim 1 wherein each means for applying
20 clamping pressure comprises:
a female threaded socket formed in a clamping frame;
a mating male threaded shaft, threaded through the female threaded socket, the
male threaded shaft having a first end operatively associated with the pressure foot, and a
second end opposite the first end; and
25 a handle operatively associated with the second end of the male threaded shaft
configured such that rotation of the handle can drive the pressure foot toward the clamping
surface.
5. The sheet material clamp of claim 1 wherein each means for applying

clamping pressure comprises:

an actuator;

a drive shaft operatively associated with the actuator; and

the pressure foot being operatively associated with the drive shaft such that

- 5 actuation of the actuator advances the drive shaft and thereby drives the pressure foot
toward the clamping surface.

6. The sheet material clamp of claim 5 wherein each actuator is fluid driven.

- 10 7. The sheet material clamp of claim 5 wherein each actuator is fluid driven
and part of the same fluid circuit, whereby each actuator is substantially simultaneously
actuated by application of fluid pressure to the circuit.

- 15 8. The sheet material clamp of claim 1 wherein the clamp base is a
substantially elongate rectangular bar.

9. The sheet material clamp of claim 4 wherein the clamp base is a
substantially elongate rectangular bar.

- 20 10. The sheet material clamp of claim 5 wherein the clamp base is a
substantially elongate rectangular bar.

- 25 11. The sheet material clamp of claim 1 wherein the clamp base is a channel
member having a channel opening sized to receive at least two juxtaposed sheets of sheet
material therein.

12. The sheet material clamp of claim 4 wherein the clamp base is a channel
member having a channel opening sized to receive at least two juxtaposed sheets of sheet
material therein.

13. The sheet material clamp of claim 5 wherein the clamp base is a channel member having a channel opening sized to receive at least two juxtaposed sheets of sheet material therein.

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14. The sheet material clamp of claim 1 wherein the clamp base comprises at least two lengthwise clamp base segments each having a clamping surface joined in series by a hinge, whereby lengthwise segments are pivotable lengthwise relative to each other while maintaining each clamping surface substantially coplanar.

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15. The sheet material clamp of claim 8 wherein the clamp base comprises at least two lengthwise clamp base segments each having a clamping surface joined in series by a hinge, whereby lengthwise segments are pivotable lengthwise relative to each other while maintaining each clamping surface substantially coplanar.

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16. The sheet material clamp of claim 11 wherein the clamp base comprises at least two lengthwise clamp base segments each having a clamping surface joined in series by a hinge, whereby lengthwise segments are pivotable lengthwise relative to each other while maintaining each clamping surface substantially coplanar.

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17. The sheet material clamp of claim 16 where a hinge is operatively associated with each clamp base segment on opposite sides of the channel opening.

18. The sheet material clamp of claim 14 wherein at least one means for
25 applying clamping pressure is attached to each clamp base segment.

19. The sheet material clamp of claim 18 wherein each means for applying clamping pressure comprises:

a female threaded socket formed in a clamping frame;

a mating male threaded shaft, threaded through the female threaded socket, the male threaded shaft having a first end operatively associated with the pressure foot, and a second end opposite the first end; and

5 a handle operatively associated with the second end of the male threaded shaft configured such that rotation of the handle can drive the pressure foot toward the clamping surface.

20. The sheet material clamp of claim 18 wherein each means for applying clamping pressure comprises:

10 an actuator;

a drive shaft operatively associated with the actuator; and

the pressure foot being operatively associated with the drive shaft such that actuation of the actuator advances the drive shaft and thereby drives the pressure foot toward the clamping surface.

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